

# AUSTRALIAN CARABID BEETLES XIV. *PERIGONA*\*

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This paper is a by-product of work on New Guinean *Perigona*, which forced me to identify the Australian species and compare them with the New Guinean ones. New Guinea, incidentally, possesses 14 species of the genus: 8 in *Perigona sensu stricto* and 6 in subgenus *Trechicus*. The only species common to Australia and New Guinea is probably the nearly cosmopolitan *nigriceps* Dejean.

The last key to Australian *Perigona* then known (3 species) is by Sloane (1903, Proc. Linn. Soc. New South Wales 28, P. 635). One additional species has been recorded since then, but probably in error. It is *P. plagiata* Putzeys, which ranges from southeastern Asia and Japan to the Philippines and New Guinea. Csiki (1924, Ann. Mus. National Hungary 21, p. 172) lists it from "New-South-Wales: Mt. Victoria (Biró, 1900)." However, I have seen (borrowed from the Hungarian National Museum) specimens with this label, and they were set with and exactly match specimens of the species collected in New Guinea by Biró. I feel sure that the supposed Australian specimens are wrongly labeled and are really from New Guinea. So far as I know, the species has not been found in Australia by other collectors.

The two subgenera of *Perigona* (see following key) differ in habits. *Perigona s. s.* usually occurs under bark of logs or in rotting logs; subgenus *Trechicus*, among leaves or in leaf mold on the floor of rain forest. *Perigona (Trechicus) nigriceps* (Dejean), however, occurs also in fermenting vegetation and some other plant materials and has been carried over the warmer parts of the world by commerce.

## Key to Australian Species of *Perigona*

1. Three seta-bearing punctures of submarginal depression (at outer curve of elytron at 2/3 or 3/5 of elytral length) forming a straight line (*Perigona s. s.*) ..... 2
- These punctures forming a triangle (subgenus *Trechicus*) ..... 3
2. Length *c.* 7 mm.; color light brown, head dark, elytra yellow ..... *tricolor*
- Length *c.* 4 mm.; reddish, head dark, elytral disc more or less (variably) dark ..... *rufilabris*
3. Eyes large, forming *c.* right angles with neck; front of head and

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- neck plainly, nearly isodiametrically reticulate; color *either* pale with head and apex of elytra darker *or* irregularly reddish castaneous with paler suture but without well defined markings ..... *nigriceps*
- *Either* eyes smaller (moderate in size), forming obtuse angles with neck, *or* front without distinct reticulate microsculpture, *or* color not as described above ..... 4
4. Head relatively wider and prothorax narrower (head/prothorax .86 and .84 in measured specimens); head and prothorax dark, elytra yellow with variable darker discal cloud ..... *dorsata*
- Head relatively narrower and prothorax wider (head/prothorax .70 and .73); color dark with margins of prothorax and elytra usually contrastingly pale (sometimes less contrasting) ..... *picta*

*Perigona (s. s.) tricolor* (Castelnau)

Castelnau 1868, Trans. R. Soc. Victoria 8, p. 127 (*Siltopia*).  
Sloane 1903, Proc. Linn. Soc. New South Wales 28, p. 635.

I do not know this species. Size alone is enough to separate it from all other Australian members of the genus. It is recorded from the Clarence River and Parramatta (Castelnau) and from Wiseman's Ferry on the Hawkesbury River (Sloane). All these localities are in New South Wales.

*Perigona (s. s.) rufilabris* (Macleay)

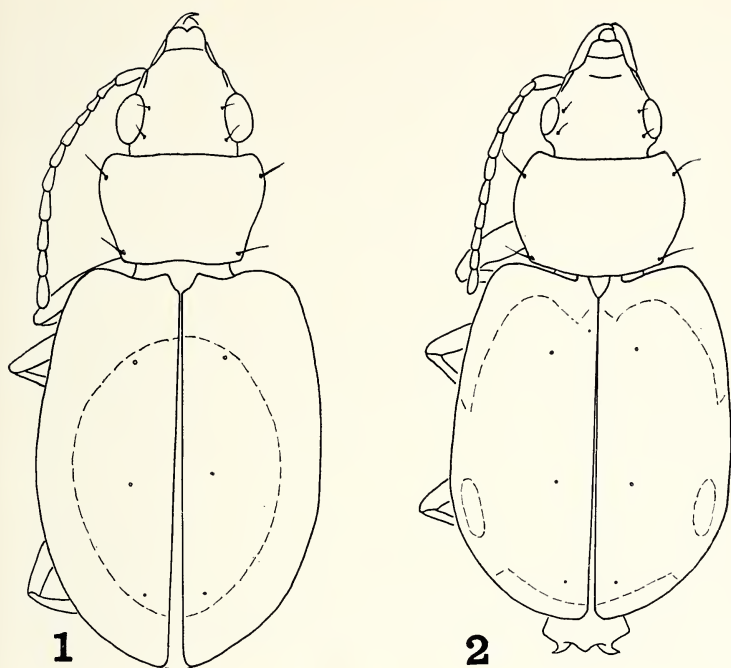
Macleay 1871, Trans. Ent. Soc. New South Wales 2, p. 114 (*Trechus*).  
Sloane 1903, Proc. Linn. Soc. New South Wales 28, p. 635.  
*basalis* Putzeys 1873, Ann. Mus. Civ. Genoa 4, p. 223.

Sloane has determined the synonymy given above. Macleay's specimen(s) were from Gayndah, South Queensland; Putzeys' (types of *basalis*), from "Queensland". I have the species from Kuranda, Longlands Gap, and Mt. Fisher (all on the Atherton Tableland in North Queensland), and from rain forest north of Dunoon in northern New South Wales.

*Perigona (Trechicus) nigriceps* (Dejean)

Dejean 1831, Species Général Coléoptères 5, p. 44 (*Bembidium*).  
Csiki 1931, Junk-Schenkling Coleop. Cat., Carabidae,  
Harpalinae 5, p. 897 (see for synonymy and references).  
*australica* Sloane 1903, Proc. Linn. Soc. New South Wales 28, p. 635.

This is a nearly cosmopolitan species, carried by man, but it occurs also in natural habitats. I took a series at Lockerbie, on the tip of

Fig. 1 *Perigona dorsata* n. sp.Fig. 2. *Perigona picta* n. sp.

Cape York, by washing thick accumulations of leaves and bird droppings from under a tree where a colony of birds had nested, and I have specimens from Lankelly Creek on the McIlwraith Range east of Coen half way up the Cape York Peninsula, and from Cairns, Kuranda, and Longlands Gap on the Atherton Tableland, North Queensland. Sloane's type of *australica* was from Mackay, Queensland. The species is to be expected anywhere in the warmer part of Australia.

***Perigona* (Trechicus) *dorsata* n. sp.**

Figure 1

Form as figured (Fig. 1), almost as in *nigriceps* but slightly less broad; head black (except labrum and mandibles testaceous), pronotum dark reddish brown, elytra reddish testaceous with median dorsal cloud brown (suture pale); shining, slightly iridescent, reticulate microsculpture lightly impressed, *c.* isodiametric on head, probably

fine and transverse on pronotum and elytra but not distinctly visible at 100 $\times$ . *Head* .86 and .84 width prothorax (in ♂♀ measured); eyes large, forming *c.* right angles with neck; antennae with middle segments scarcely longer than wide; frontal sulci moderate, irregular, ending before mid-eye level; 2 setae over each eye. *Prothorax*: width/length 1.44 and 1.46; base/apex 1.01 and 1.05; disc with middle line distinct, transverse impressions vague, baso-lateral impressions slight; 2 pair lateral setae present. *Elytra* 2/3 wider than prothorax (E/P 1.68 and 1.66); impression behind puncture-triangle (near margin at 2/3 or 3/5 of elytral length) wide, flat-bottomed; discal striae indicated, first 2 or 3 slightly impressed, irregular but not distinctly punctate; intervals not or very sparsely punctulate, 3rd 3-punctate with anterior and middle punctures near 3rd stria and posterior one near 2nd stria. *Inner wings* fully developed. *Lower surface, legs, and secondary sexual characters* normal; ♂ front tarsi scarcely dilated, 3 segments briefly biserially squamulose. *Measurements*: length *c.* 3-4; width *c.* 1.4 mm.

Holotype ♂ (M. C. Z. No. 30, 524) and 9 paratypes all from Kuranda, near Cairns, North Queensland, *c.* 1000 ft., Feb., 1958, taken by myself in piles of dead leaves under the heads of felled trees on the edge of rain forest. Also 1 specimen, not a type, from Rocky River, Cape York Peninsula, North Queensland, (late May or early June) 1958, also taken by myself.

See preceding key for distinguishing characters of this new species.

### *Perigona (Trechicus) picta* n. sp.

#### Figure 2

Form as figured (Fig. 2), stouter than *nigriceps* or *dorsata*, with wider and more rounded prothorax and narrower head; piceous black, with prothorax (including apex and base) and elytra (base, sides, and apex) margined with testaceous, the pale color expanded inward on elytra before subapical curve, and dark color reaching margin of elytra at the curve and extending forward along actual margin; moderately shining, faintly iridescent, microsculpture absent or faint on head, apparently fine and strongly transverse on pronotum and elytra. *Head* .70 and .73 width prothorax (in ♂♀ measured); eyes smaller than in preceding species, partly enclosed by genae, forming obtuse angles with neck; antennae with middle segments slightly longer than wide; frontal sulci impressed, diverging posteriorly, almost reaching anterior supraocular setae. *Prothorax* rounded-transverse, with basal angles very obtuse; width/length 1.51 and 1.50; base/apex

1.10 and 1.13; disc with middle line distinct, transverse impressions vague, baso-lateral impressions slight and poorly defined; 2 pair lateral setae present. *Elytra* c.  $\frac{1}{2}$  wider than prothorax (E/P 1.50 and 1.53); submarginal channel behind puncture-triangle wide, flat-bottomed; discal striae impressed, irregularly subpunctate; intervals not or not much punctulate, 3rd 3-punctate as in *dorsata*. *Inner wings* fully developed. *Lower surface, legs, and secondary sexual characters* normal; ♂ front tarsi scarcely dilated, 3 segments inconspicuously biserially squamulose. *Measurements*: length 2.8-3.2; width 1.3-1.4 mm.

Holotype ♂ (M. C. Z. No. 30, 525) and 14 paratypes from Longlands Gap, Atherton Tableland, North Queensland, c. 3000 ft., Feb. 1958, taken by myself by washing piles of dead leaves from under the heads of felled trees in rain forest. Five additional paratypes from Atherton, Atherton Tableland, North Queensland, Dec. 1957-Feb. 1958, taken by myself. And 2, not types, from Kuranda, near Cairns, c. 1000 ft., taken by myself.

This species is immediately distinguished from *nigriceps* and *dorsata*, above, by its broader form, more rounded prothorax, and narrower head with relatively smaller eyes, as well as by the usually sharply marked color pattern. The pattern is less well defined in the Kuranda specimens, which nevertheless show the structural characters of the species.